

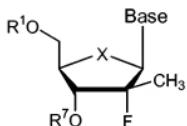
**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

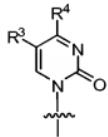
**Listing of Claims:**

Claims 1-5 (Canceled).

Claim 6 (Currently Amended): A (2'R)-2'-deoxy-2'-fluoro-2'-C-methyl nucleoside ( $\beta$ -D or  $\beta$ -L) or its pharmaceutically acceptable salt or prodrug thereof of the structure:



wherein the Base is a pyrimidine base represented by the following formula



X is O, S, CH<sub>2</sub>, Se, NH, N-alkyl, CHW (R, S, or racemic), C(W)<sub>2</sub>, wherein W is F, Cl, Br, or I; and,

R<sup>1</sup> and R7 are independently H, phosphate, including a monophosphate, a diphosphate, a triphosphate, or a stabilized phosphate prodrug; a H-phosphonate, including stabilized H-phosphonates; acyl, including optionally substituted phenyl and lower acyl; an alkyl, including lower alkyl; O substituted carboxyalkylamino or its peptide derivatives; sulfonate ester, including an alkyl sulfonyl, or an arylalkyl sulfonyl; and

R<sup>3</sup> is H and R<sup>4</sup> is NH<sub>2</sub> or OH.

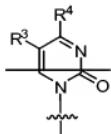
, including methanesulfonyl and benzyl, wherein the phenyl group is optionally substituted, a lipid, including a phospholipid; an L or D-amino acid; a

carbohydrate, a peptide, a cholesterol, or other pharmaceutically acceptable leaving group which when administered *in vivo* is capable of providing a compound wherein R<sup>1</sup> or R<sup>7</sup> is independently H or phosphate; R<sup>1</sup> and R<sup>7</sup> can also be linked with cyclic phosphate group.

Claim 7 (Currently Amended): The (2'R)-2'-deoxy-2'-fluoro-2'-C-methyl nucleoside (β-D or β-L) of claim 6 or its pharmaceutically acceptable salt or prodrug thereof,

wherein R<sup>7</sup> is H and R<sup>1</sup> is a monophosphate, a diphosphate, or a triphosphate,

the Base is represented by the following formula

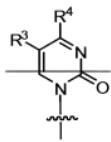


R<sup>3</sup> and R<sup>4</sup> are independently H, halogen including F, Cl, Br, I, OH, OR', SH, SR', NH<sub>2</sub>, NHR', NR', lower alkyl of C<sub>1</sub>-C<sub>6</sub>, halogenated (F, Cl, Br, I) lower alkyl of C<sub>1</sub>-C<sub>6</sub>, lower alkenyl of C<sub>2</sub>-C<sub>6</sub>, halogenated (F, Cl, Br, I) lower alkenyl of C<sub>2</sub>-C<sub>6</sub>, lower alkynyl of C<sub>2</sub>-C<sub>6</sub>, halogenated (F, Cl, Br, I) lower alkynyl of C<sub>2</sub>-C<sub>6</sub>, lower alkoxy of C<sub>1</sub>-C<sub>6</sub>, halogenated (F, Cl, Br, I) lower alkoxy of C<sub>1</sub>-C<sub>6</sub>, CO<sub>2</sub>H, CO<sub>2</sub>R', CONH<sub>2</sub>, CONHR', CONR', CH=CHCO<sub>2</sub>H, CH=CHCO<sub>2</sub>R'; and,

R' is an optionally substituted alkyl of C<sub>1</sub>-C<sub>12</sub>-cycloalkyl, optionally substituted alkenyl of C<sub>2</sub>-C<sub>6</sub>, optionally substituted lower alkenyl of C<sub>2</sub>-C<sub>6</sub>, or optionally substituted acyl.

Claim 8 (Currently Amended): The (2'R)-2'-deoxy-2'-fluoro-2'-C-methyl nucleoside (β-D) of claim 6 or its pharmaceutically acceptable salt or prodrug thereof,

— wherein the Base is represented by the following formula



and

wherein

R<sup>7</sup> is H and R<sup>1</sup> is a diphosphate or a triphosphate.

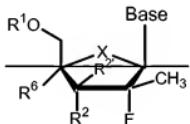
R<sup>1</sup> and R<sup>7</sup> are H, and

R<sup>3</sup> is H, and

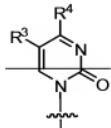
R<sup>4</sup> is NH<sub>2</sub> or OH.

Claim 9 (Currently Amended): [[A]] The (2'R)-2'-deoxy-2'-fluoro-2'-C-methyl nucleoside (β-D or β-L) of claim 6 or its pharmaceutically acceptable salt thereof wherein R<sup>7</sup> is H and R<sup>1</sup> is a triphosphate.

of the formula:



wherein the Base is



X is O, S, CH<sub>2</sub>, Se, NH, N-alkyl, CHW (R, S, or racemic), C(W)<sub>2</sub>, wherein W is F, Cl, Br, or I;

$R^+$  and  $R^2$  are independently H, phosphate, including monophosphate, diphosphate, triphosphate, or a stabilized phosphate prodrug, H-phosphonate, including stabilized H phosphonates, acyl, including optionally substituted phenyl and lower acyl, alkyl, including lower alkyl, O-substituted carboxyalkylamino or its peptide derivatives, sulfonate ester, including alkyl or arylalkyl sulfonyl, including methanesulfonyl and benzyl, wherein the phenyl group is optionally substituted, a lipid, including a phospholipid, an L- or D-amino acid (or racemic mixture), a carbohydrate, a peptide, a cholesterol, or other pharmaceutically acceptable leaving group which when administered *in vivo* is capable of providing a compound wherein  $R^+$  is H or phosphate;  $R^2$  is H or phosphate;  $R^+$  and  $R^2$  or  $R^2$  can also be linked with cyclic phosphate group;

$R^3$  and  $R^4$  are independently H,  $C_{1-4}$  alkyl,  $C_{1-4}$  alkenyl,  $C_{1-4}$  alkynyl, vinyl,  $N_3$ ,  $CN$ ,  $Cl$ ,  $Br$ ,  $F$ ,  $I$ ,  $NO_2$ ,  $C(O)O(C_{1-4} alkyl)$ ,  $C(O)O(C_{1-4} alkyl)$ ,  $C(O)O(C_{1-4} alkynyl)$ ,  $C(O)O(C_{1-4} alkenyl)$ ,  $O(C_{1-4} acyl)$ ,  $O(C_{1-4} alkyl)$ ,  $O(C_{1-4} alkynyl)$ ,  $S(C_{1-4} acyl)$ ,  $S(C_{1-4} alkyl)$ ,  $S(C_{1-4} alkynyl)$ ,  $S(C_{1-4} alkenyl)$ ,  $SO(C_{1-4} acyl)$ ,  $SO(C_{1-4} alkynyl)$ ,  $SO(C_{1-4} alkenyl)$ ,  $SO_2(C_{1-4} acyl)$ ,  $SO_2(C_{1-4} alkynyl)$ ,  $SO_2(C_{1-4} alkenyl)$ ,  $O_2S(C_{1-4} acyl)$ ,  $O_2S(C_{1-4} alkyl)$ ,  $O_2S(C_{1-4} alkynyl)$ ,  $NH_2$ ,  $NH(C_{1-4} alkyl)$ ,  $NH(C_{1-4} alkenyl)$ ,  $NH(C_{1-4} alkynyl)$ ,  $NH(C_{1-4} acyl)$ ,  $N(C_{1-4} alkyl)_2$ ,  $N(C_{1-4} acyl)_2$ , wherein alkyl, alkynyl, alkenyl and vinyl are optionally substituted by  $N_3$ ,  $CN$ , one to three halogen (Cl, Br, F, I),  $NO_2$ ,  $C(O)O(C_{1-4} alkyl)$ ,  $C(O)O(C_{1-4} alkyl)$ ,  $C(O)O(C_{1-4} alkynyl)$ ,  $C(O)O(C_{1-4} alkenyl)$ ,  $O(C_{1-4} acyl)$ ,  $O(C_{1-4} alkyl)$ ,  $O(C_{1-4} alkynyl)$ ,  $S(C_{1-4} acyl)$ ,  $S(C_{1-4} alkyl)$ ,  $S(C_{1-4} alkynyl)$ ,  $S(C_{1-4} alkenyl)$ ,  $SO(C_{1-4} acyl)$ ,  $SO(C_{1-4} alkyl)$ ,  $SO(C_{1-4} alkynyl)$ ,  $SO(C_{1-4} alkenyl)$ ,  $SO_2(C_{1-4} acyl)$ ,  $SO_2(C_{1-4} alkyl)$ ,  $SO_2(C_{1-4} alkynyl)$ ,  $SO_2(C_{1-4} alkenyl)$ ,  $O_2S(C_{1-4} acyl)$ ,  $O_2S(C_{1-4} alkyl)$ ,  $O_2S(C_{1-4} alkynyl)$ ,  $NH_2$ ,  $NH(C_{1-4} alkyl)$ ,  $NH(C_{1-4} alkenyl)$ ,  $NH(C_{1-4} alkynyl)$ ,  $NH(C_{1-4} acyl)$ ,  $N(C_{1-4} alkyl)_2$

$\text{N}(\text{C}_{1-4}\text{acyl})_2$ ,  $\text{OR}^7$ ;  $\text{R}^2$  and  $\text{R}^3$  can be linked together to form a vinyl optionally substituted by one or two of  $\text{N}_2$ ,  $\text{CN}$ ,  $\text{Cl}$ ,  $\text{Br}$ ,  $\text{I}$ ,  $\text{NO}_2$ ;

$\text{R}^3$  and  $\text{R}^4$  are independently  $\text{H}$ , halogen including  $\text{F}$ ,  $\text{Cl}$ ,  $\text{Br}$ ,  $\text{I}$ ,  $\text{OH}$ ,  $\text{OR}^1$ ,  $\text{SH}$ ,  $\text{SR}^1$ ,  $\text{NH}_2$ ,  $\text{NHR}^1$ ,  $\text{NR}^1_2$ , lower alkyl of  $\text{C}_1\text{-C}_6$ , halogenated ( $\text{F}$ ,  $\text{Cl}$ ,  $\text{Br}$ ,  $\text{I}$ ) lower alkyl of  $\text{C}_1\text{-C}_6$ , lower alkenyl of  $\text{C}_2\text{-C}_6$ , halogenated ( $\text{F}$ ,  $\text{Cl}$ ,  $\text{Br}$ ,  $\text{I}$ ) lower alkenyl of  $\text{C}_2\text{-C}_6$ , lower alkynyl of  $\text{C}_2\text{-C}_6$ , halogenated ( $\text{F}$ ,  $\text{Cl}$ ,  $\text{Br}$ ,  $\text{I}$ ) lower alkynyl of  $\text{C}_2\text{-C}_6$ , lower alkoxy of  $\text{C}_1\text{-C}_6$ , halogenated ( $\text{F}$ ,  $\text{Cl}$ ,  $\text{Br}$ ,  $\text{I}$ ) lower alkoxy of  $\text{C}_1\text{-C}_6$ ,  $\text{CO}_2\text{H}$ ,  $\text{CO}_2\text{R}^1$ ,  $\text{CONH}_2$ ,  $\text{CONHR}^1$ ,  $\text{CONR}^1_2$ ,  $\text{CH}=\text{CHCO}_2\text{H}$ ,  $\text{CH}=\text{CHCO}_2\text{R}^1$ ; and,

$\text{R}^1$  is an optionally substituted alkyl of  $\text{C}_1\text{-C}_{12}$ , cycloalkyl, optionally substituted alkynyl of  $\text{C}_2\text{-C}_6$ , optionally substituted lower alkenyl of  $\text{C}_2\text{-C}_6$ , or optionally substituted acetyl;

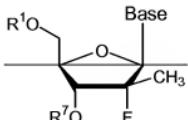
$\text{R}^6$  is an optionally substituted alkyl (including lower alkyl), cyano ( $\text{CN}$ ),  $\text{CH}_3$ ,  $\text{OCH}_3$ ,  $\text{OCH}_2\text{CH}_3$ , hydroxy methyl ( $\text{CH}_2\text{OH}$ ), fluoromethyl ( $\text{CH}_2\text{F}$ ), azide ( $\text{N}_2$ ),  $\text{CHCN}$ ,  $\text{CH}_2\text{N}_2$ ,  $\text{CH}_2\text{NH}_2$ ,  $\text{CH}_2\text{NHCH}_3$ ,  $\text{CH}_2\text{N}(\text{CH}_3)_2$ , alkyne (optionally substituted), or fluoro;

or its pharmaceutically acceptable salt or prodrug thereof.

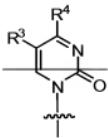
Claim 10 (Currently Amended): [[A]] (2'R)-2'-deoxy-2'-fluoro-2'-C-methyl nucleoside ( $\beta$ -D or  $\beta$ -L) of claim 6 or its pharmaceutically acceptable salt thereof

wherein  $\text{R}^1$  and  $\text{R}^7$  are  $\text{H}$ .

of the formula



wherein the Base is



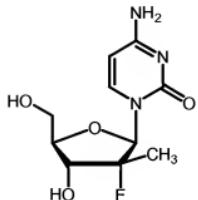
$R^1$  and  $R^2$  are independently H, phosphate, including monophosphate, diphosphate, triphosphate, or a stabilized phosphate prodrug, H-phosphonate, including stabilized H-phosphonates, acyl, including optionally substituted phenyl and lower acyl, alkyl, including lower alkyl, O-substituted carboxyalkylamino or its peptide derivatives, sulfonate ester, including alkyl or arylalkyl sulfonyl, including methanesulfonyl and benzyl, wherein the phenyl group is optionally substituted, a lipid, including a phospholipid, an L or D amino acid (or racemic mixture), a carbohydrate, a peptide, a cholesterol, or other pharmaceutically acceptable leaving group which when administered *in vivo* is capable of providing a compound wherein  $R^1$  is H or phosphate;  $R^2$  is H or phosphate;  $R^1$  and  $R^2$  or  $R^2$  can also be linked with cyclic phosphate group;

$R^3$  and  $R^4$  are independently H, halogen including F, Cl, Br, I, OH, OR', SH, SR', NH<sub>2</sub>, NHR', NR'<sub>2</sub>, lower alkyl of C<sub>1</sub>-C<sub>6</sub>, halogenated (F, Cl, Br, I) lower alkyl of C<sub>1</sub>-C<sub>6</sub>, lower alkenyl of C<sub>2</sub>-C<sub>6</sub>, halogenated (F, Cl, Br, I) lower alkenyl of C<sub>2</sub>-C<sub>6</sub>, lower alkynyl of C<sub>2</sub>-C<sub>6</sub>, halogenated (F, Cl, Br, I) lower alkynyl of C<sub>2</sub>-C<sub>6</sub>, lower alkoxy of C<sub>1</sub>-C<sub>6</sub>, halogenated (F, Cl, Br, I) lower alkoxy of C<sub>1</sub>-C<sub>6</sub>, CO<sub>2</sub>H, CO<sub>2</sub>R', CONH<sub>2</sub>, CONHR', CONR'<sub>2</sub>, CH=CHCO<sub>2</sub>H, CH=CHCO<sub>2</sub>R';

$R'$  is an optionally substituted alkyl of C<sub>1</sub>-C<sub>12</sub>, cycloalkyl, optionally substituted alkenyl of C<sub>2</sub>-C<sub>6</sub>, optionally substituted lower alkenyl of C<sub>2</sub>-C<sub>6</sub>, or optionally substituted acyl;

or its pharmaceutically acceptable salt or prodrug thereof.

Claim 11 (Currently Amended): A (2'R)-2'-deoxy-2'-fluoro-2'-C-methyl nucleoside ( $\beta$ -D) or its pharmaceutically acceptable salt or prodrug thereof of the formula:



Claims 12-20 (Canceled).

Claim 21 (Currently Amended): A pharmaceutical composition comprising the nucleoside of claim 6 or its pharmaceutically acceptable salt or prodrug and a pharmaceutically acceptable carrier.

Claim 22 (Currently Amended): A pharmaceutical composition comprising the nucleoside of claim 7 or its pharmaceutically acceptable salt or prodrug and a pharmaceutically acceptable carrier.

Claim 23 (Currently Amended): A pharmaceutical composition comprising the nucleoside of claim 8 or its pharmaceutically acceptable salt or prodrug and a pharmaceutically acceptable carrier.

Claim 24 (Currently Amended): A pharmaceutical composition comprising the nucleoside of claim 9 or its pharmaceutically acceptable salt or prodrug and a pharmaceutically acceptable carrier.

Claim 25 (Currently Amended): A pharmaceutical composition comprising the nucleoside of claim 10 or its pharmaceutically acceptable salt ~~or prodrug~~ and a pharmaceutically acceptable carrier.

Claim 26 (Currently Amended): A pharmaceutical composition comprising the nucleoside of claim 11 or its pharmaceutically acceptable salt ~~or prodrug~~ and a pharmaceutically acceptable carrier.

Claims 27-35 (Cancelled).

Claim 36 (Withdrawn; Currently Amended): A method for the treatment of a Flaviviridae infection or prophylaxis of hepatitis C infection

comprising administering to a mammal in need thereof host an antivirally effective amount of the nucleoside of claim 6 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier;

wherein a viral agent of the Flaviviridae infection is selected from among a flavivirus and a pestivirus.

Claim 37 (Withdrawn; Currently Amended): A method for the treatment of a Flaviviridae infection or prophylaxis of hepatitis C infection

comprising administering to a mammal in need thereof host an antivirally effective amount of the nucleoside of claim 7 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier;

wherein a viral agent of the Flaviviridae infection is selected from among a flavivirus and a pestivirus.

Claim 38 (Withdrawn; Currently Amended): A method for the treatment of a Flaviviridae infection or prophylaxis of hepatitis C infection

comprising administering to a mammal in need thereof host an antivirally effective amount of the nucleoside of claim 8 or its pharmaceutically acceptable salt or prodrug optionally in a pharmaceutically acceptable carrier;

wherein a viral agent of the Flaviviridae infection is selected from among a flavivirus and a pestivirus.

Claim 39 (Withdrawn; Currently Amended): A method for the treatment of a Flaviviridae infection or prophylaxis of hepatitis C infection

comprising administering to a mammal in need thereof host an antivirally effective amount of the nucleoside of claim 9 or its pharmaceutically acceptable salt or prodrug optionally in a pharmaceutically acceptable carrier;

wherein a viral agent of the Flaviviridae infection is selected from among a flavivirus and a pestivirus.

Claim 40 (Withdrawn; Currently Amended): A method for the treatment of a Flaviviridae infection or prophylaxis of hepatitis C infection

comprising administering to a mammal in need thereof host an antivirally effective amount of the nucleoside of claim 10 or its pharmaceutically acceptable salt or prodrug optionally in a pharmaceutically acceptable carrier;

wherein a viral agent of the Flaviviridae infection is selected from among a flavivirus and a pestivirus.

Claim 41 (Withdrawn; Currently Amended): A method for the treatment of a Flaviviridae infection or prophylaxis of hepatitis C infection

comprising administering to a mammal in need thereof ~~host~~ an antivirally effective amount of the nucleoside of claim 11 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier;

wherein a viral agent of the Flaviviridae infection is selected from among a flavivirus and a pestivirus.

Claims 42-65 (Cancelled).

Claim 66 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a yellow fever virus infection comprising administering to a mammal in need thereof ~~host~~ an antivirally effective amount of the nucleoside of claim 6 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claim 67 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a yellow fever virus infection comprising administering to a mammal in need thereof ~~host~~ an antivirally effective amount of the nucleoside of claim 7 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claim 68 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a yellow fever virus infection comprising administering to a mammal in need thereof ~~host~~ an antivirally effective amount of the nucleoside of claim 8 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claim 69 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a yellow fever virus infection comprising administering to a mammal in need thereof ~~host~~ an antivirally effective amount of the nucleoside of claim 9 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claim 70 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a yellow fever virus infection comprising administering to a mammal in need thereof ~~host~~ an antivirally effective amount of the nucleoside of claim 10 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claim 71 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a yellow fever virus infection comprising administering to a mammal in need thereof ~~host~~ an antivirally effective amount of the nucleoside of claim 11 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claims 72-80 (Canceled).

Claim 81 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a West Nile virus infection comprising administering to a mammal in need thereof ~~host~~ an antivirally effective amount of the nucleoside of claim 6 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claim 82 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a West Nile virus infection comprising administering to a mammal in need thereof ~~host~~ an antivirally effective amount of the nucleoside of claim 7 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claim 83 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a West Nile virus infection comprising administering to a mammal in need thereof ~~host~~ an antivirally effective amount of the nucleoside of claim 8 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claim 84 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a West Nile virus infection comprising administering to a mammal in need thereof ~~host~~ an antivirally effective amount of the nucleoside of claim 9 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claim 85 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a West Nile virus infection comprising administering to a mammal in need thereof ~~host~~ an antivirally effective amount of the nucleoside of claim 10 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claim 86 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a West Nile virus infection comprising administering to a mammal in need thereof ~~host~~ an antivirally effective amount of the nucleoside of claim 11 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claims 87-95 (Canceled).

Claim 96 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a Dengue virus infection comprising administering to a ~~host~~ an antivirally effective amount of the nucleoside of claim 6 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claim 97 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a Dengue virus infection comprising administering to a ~~host~~ an antivirally effective amount of the nucleoside of claim 7 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claim 98 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a Dengue virus infection comprising administering to a ~~host~~ an antivirally effective amount of the nucleoside of claim 8 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claim 99 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a Dengue virus infection comprising administering to a ~~host~~ an antivirally effective amount of the nucleoside of claim 9 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claim 100 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a Dengue virus infection comprising administering to a ~~host~~ an antivirally effective amount of the nucleoside of claim 10 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claim 101 (Withdrawn; Currently Amended): A method for the treatment ~~or prophylaxis~~ of a Dengue virus infection comprising administering to a ~~host~~ an antivirally effective amount of the nucleoside of claim 11 or its pharmaceutically acceptable salt ~~or prodrug~~ optionally in a pharmaceutically acceptable carrier.

Claims 102-105 (Canceled).

Claim 106 (Withdrawn; Currently Amended): The method of claim 36, [[31,]] wherein the antivirally effective amount of the nucleoside is administered in combination or alternation with at least one treatment selected from among an antiviral treatment, an antibacterial treatment, an anticancer treatment, and interferon.

the group consisting of: interferon, including interferon alpha 2a, interferon alpha 2b, a pegylated interferon, interferon beta, interferon gamma, interferon tau and interferon omega; an interleukin, including interleukin 10 and interleukin 12; ribavirin; interferon alpha or pegylated interferon alpha in combination with ribavirin or levovirin; levovirin; a protease inhibitor including an NS3 inhibitor, a NS3-4A inhibitor; a helicase inhibitor; a polymerase inhibitor including HCV RNA polymerase and NS5B polymerase inhibitor; gliotoxin; an IRES inhibitor; and antisense oligonucleotide; a thiazolidine derivative; a benzamilide, a ribozyme; another nucleoside, nucleoside prodrug or nucleoside derivative; a L-amino-alkylecyclohexane; an antioxidant including vitamin E; squalene; amantadine; a bile acid; N-(phosphonoacetyl)-L-aspartic acid; a benzenedicarboxamide; polyadenylic acid; a benzimidazoles; thymosin; a beta tubulin inhibitor; a prophylactic vaccine; an immune modulator; an IMPDH inhibitor; silybin-phosphatidyletholine phytosome; and mycophenolate.

Claim 107 (Withdrawn; Currently Amended): The method of claim 41, wherein the antivirally effective amount of the nucleoside is administered in combination or alternation with at least one treatment selected from among an antiviral treatment, an antibacterial treatment, an anticancer treatment, and interferon.

the group consisting of: interferon, including interferon alpha 2a, interferon alpha 2b, a pegylated interferon, interferon beta, interferon gamma, interferon tau and interferon omega; an interleukin, including interleukin 10 and interleukin 12; ribavirin; interferon alpha or pegylated interferon alpha in combination with ribavirin or levovirin; levovirin; a protease inhibitor including an NS3 inhibitor, a NS3-4A inhibitor; a helicase inhibitor; a polymerase inhibitor including HCV RNA polymerase and NS5B polymerase inhibitor; gliotoxin; an IRES inhibitor; and antisense oligonucleotide; a thiazolidine derivative; a benzamilide, a ribozyme; another nucleoside, nucleoside prodrug or nucleoside derivative; a L-amino-alkylecyclohexane; an antioxidant including vitamin E; squalene; amantadine; a bile acid; N-(phosphonoacetyl)-L-aspartic acid; a benzenedicarboxamide; polyadenylic acid; a benzimidazoles; thymosin; a beta tubulin inhibitor; a prophylactic vaccine; an immune modulator; an IMPDH inhibitor; silybin-phosphatidyletholine phytosome; and mycophenolate.

Claims 108-113 (Canceled).

Claim 114 (Withdrawn; Currently Amended): The method of claim 66, [[61,]] wherein the antivirally effective amount of the nucleoside is administered in combination or alternation with at least one treatment selected from among an antiviral treatment, an antibacterial treatment, an anticancer treatment, and interferon.

the group consisting of: interferon, including interferon alpha 2a, interferon alpha 2b, a pegylated interferon, interferon beta, interferon gamma, interferon tau and interferon omega; an interleukin, including interleukin 10 and interleukin 12; ribavirin; interferon alpha or pegylated interferon alpha in combination with ribavirin or levovirin; levovirin; a protease inhibitor including an NS3 inhibitor, a NS3-4A inhibitor; a helicase inhibitor; a polymerase inhibitor including HCV RNA polymerase and NS5B polymerase inhibitor; gliotoxin; an IRES inhibitor; and antisense oligonucleotide; a thiazolidine derivative; a benzamilide, a ribozyme; another nucleoside, nucleoside prodrug or nucleoside derivative; a 1-amino-alkyleyclohexane; an antioxidant including vitamin E; squalene; amantadine; a bile acid; N (phosphoacetyl) L-aspartic acid; a benzenedicarboxamide; polyadenylic acid; a benzimidazoles; thymosin; a beta tubulin inhibitor; a prophylactic vaccine; an immune modulator; an IMPDH inhibitor; silybin-phosphatidyletholine phytosome; and mycophenolate.

Claim 115 (Withdrawn; Currently Amended): The method of claim 71, wherein the antivirally effective amount of the nucleoside is administered in combination or alternation with at least one treatment selected from among an antiviral treatment, an antibacterial treatment, an anticancer treatment, and interferon.

the group consisting of: interferon, including interferon alpha 2a, interferon alpha 2b, a pegylated interferon, interferon beta, interferon gamma, interferon tau and interferon omega; an interleukin, including interleukin 10 and interleukin 12; ribavirin; interferon alpha or pegylated interferon alpha in combination with ribavirin or levovirin; levovirin; a protease inhibitor

including an NS3 inhibitor; a NS3-4A inhibitor; a helicase inhibitor; a polymerase inhibitor including HCV RNA polymerase and NS5B polymerase inhibitor; gliotoxin; an IRES inhibitor; and antisense oligonucleotide; a thiazolidine derivative; a benzamilide; a ribozyme; another nucleoside; nucleoside prodrug or nucleoside derivative; a 1-amino-alkyleyclohexane; an antioxidant including vitamin E; squalene; amantadine; a bile acid; N-(phosphonoacetyl)-L-aspartic acid; a benzenedicarboxamide; polyadenylic acid; a benzimidazoles; thymosin; a beta tubulin inhibitor; a prophylactic vaccine; an immune modulator; an IMPDH inhibitor; silybin-phosphatidylecholine phytosome; and mycophenolate.

Claims 116-117 (Canceled).

Claim 118 (Withdrawn; Currently Amended): The method of claim 76, wherein the antivirally effective amount of the nucleoside is administered in combination or alternation with at least one treatment selected from among an antiviral treatment, an antibacterial treatment, an anticancer treatment, and interferon.

~~the group consisting of: interferon, including interferon alpha 2a, interferon alpha 2b, a pegylated interferon, interferon beta, interferon gamma, interferon tau and interferon omega; an interleukin, including interleukin 10 and interleukin 12; ribavirin; interferon alpha or pegylated interferon alpha in combination with ribavirin or levovirin; levovirin; a protease inhibitor including an NS3 inhibitor; a NS3-4A inhibitor; a helicase inhibitor; a polymerase inhibitor including HCV RNA polymerase and NS5B polymerase inhibitor; gliotoxin; an IRES inhibitor; and antisense oligonucleotide; a thiazolidine derivative; a benzamilide; a ribozyme; another nucleoside; nucleoside prodrug or nucleoside derivative; a 1-amino-alkyleyclohexane; an antioxidant including vitamin E; squalene; amantadine; a bile acid; N-(phosphonoacetyl)-L-aspartic acid; a benzenedicarboxamide; polyadenylic acid; a benzimidazoles; thymosin; a beta tubulin inhibitor; a prophylactic vaccine; an immune modulator; an IMPDH inhibitor; silybin-phosphatidylecholine phytosome; and mycophenolate.~~

Claim 119 (Withdrawn): The method of 86, wherein the antivirally effective amount of the nucleoside is administered in combination or alternation with at least one treatment selected from among an antiviral treatment, an antibacterial treatment, an anticancer treatment, and interferon.

the group consisting of: interferon, including interferon alpha 2a, interferon alpha 2b, a pegylated interferon, interferon beta, interferon gamma, interferon tau and interferon omega; an interleukin, including interleukin 10 and interleukin 12; ribavirin; interferon alpha or pegylated interferon alpha in combination with ribavirin or levovirin; levovirin; a protease inhibitor including an NS3 inhibitor, a NS3-4A inhibitor; a helicase inhibitor; a polymerase inhibitor including HCV RNA polymerase and NS5B polymerase inhibitor; gliotoxin; an IRES inhibitor; and antisense oligonucleotide; a thiazolidine derivative; a benzamilide; a ribozyme; another nucleoside; nucleoside prodrug or nucleoside derivative; a 1 amino alkyleyleohexane; an antioxidant including vitamin E; squalene; amantadine; a bile acid; N-(phosphonoacetyl)-L-aspartic acid; a benzenedicarboxamide; polyadenylic acid; a benzimidazole; thymosin; a beta tubulin inhibitor; a prophylactic vaccine; an immune modulator; an IMPDH inhibitor; silybin-phosphatidylcholine phytosome; and mycophenolate.

Claims 120-121 (Canceled).

Claim 122 (Withdrawn; Currently Amended): The method of claim 96, [[91,]] wherein the antivirally effective amount of the nucleoside is administered in combination or alternation with at least one treatment selected from among an antiviral treatment, an antibacterial treatment, an anticancer treatment, and interferon.

the group consisting of: interferon, including interferon alpha 2a, interferon alpha 2b, a pegylated interferon, interferon beta, interferon gamma, interferon tau and interferon omega; an interleukin, including interleukin 10 and interleukin 12; ribavirin; interferon alpha or pegylated interferon alpha in combination with ribavirin or levovirin; levovirin; a protease inhibitor including an NS3 inhibitor, a NS3-4A inhibitor; a helicase inhibitor; a polymerase inhibitor

including HCV RNA polymerase and NS5B polymerase inhibitor; gliotoxin; an IRES inhibitor; and antisense oligonucleotide; a thiazolidine derivative; a benzamilide; a ribozyme; another nucleoside; nucleoside prodrug or nucleoside derivative; a 1 amino alkyleyleohexane; an antioxidant including vitamin E; squalene; amantadine; a bile acid; N (phosphonoacetyl)-L-aspartic acid; a benzenediecarboxamide; polyadenylic acid; a benzimidazoles; thymosin; a beta tubulin inhibitor; a prophylactic vaccine; an immune modulator; an IMPDH inhibitor; silybin-phosphatidylcholine phytosome; and mycophenolate.

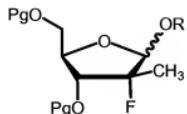
Claim 123 (Withdrawn; Currently Amended): The method of claim 101, wherein the antivirally effective amount of the nucleoside is administered in combination or alternation with at least one treatment selected from among an antiviral treatment, an antibacterial treatment, an anticancer treatment, and interferon.

~~the group consisting of: interferon, including interferon alpha 2a, interferon alpha 2b, a pegylated interferon, interferon beta, interferon gamma, interferon tau and interferon omega; an interleukin, including interleukin 10 and interleukin 12; ribavirin; interferon alpha or pegylated interferon alpha in combination with ribavirin or levovirin; levovirin; a protease inhibitor including an NS3 inhibitor, a NS3-4A inhibitor; a helicase inhibitor; a polymerase inhibitor including HCV RNA polymerase and NS5B polymerase inhibitor; gliotoxin; an IRES inhibitor; and antisense oligonucleotide; a thiazolidine derivative; a benzamilide; a ribozyme; another nucleoside; nucleoside prodrug or nucleoside derivative; a 1 amino alkyleyleohexane; an antioxidant including vitamin E; squalene; amantadine; a bile acid; N (phosphonoacetyl)-L-aspartic acid; a benzenediecarboxamide; polyadenylic acid; a benzimidazoles; thymosin; a beta tubulin inhibitor; a prophylactic vaccine; an immune modulator; an IMPDH inhibitor; silybin-phosphatidylcholine phytosome; and mycophenolate.~~

Claims 124-125 (Canceled).

Claim 126 (Withdrawn; Currently Amended): A method of synthesizing the nucleoside of claim 6, claim 11, which comprises

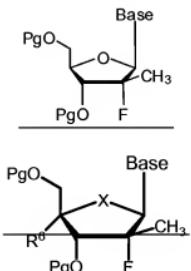
glycosylating the pyrimidine with a compound having the following structure:



wherein R is lower alkyl, acyl, benzoyl, or mesyl; and Pg is selected from among any acceptable protecting group consisting of but not limited to C(O)-alkyl, C(O)Ph, C(O)aryl, CH<sub>3</sub>, CH<sub>2</sub>-alkyl, CH<sub>2</sub>-alkenyl, CH<sub>2</sub>Ph, CH<sub>2</sub>-aryl, CH<sub>2</sub>O-alkyl, CH<sub>2</sub>O-aryl, SO<sub>2</sub>-alkyl, SO<sub>2</sub>-aryl, *tert*-butyldimethylsilyl, *tert*-butyldiphenylsilyl, or both Pg's may come together to form a 1,3-(1,1,3,3-tetraisopropylsiloxylidene).

Claim 127 (Withdrawn; Currently Amended): A method of synthesizing the nucleoside of claim 6, claim 1, which comprises

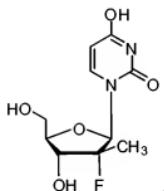
selectively deprotecting [[the]] a 3'-OPg or [[the]] a 5'-OPg of a compound having the following structure:



wherein, each Pg is independently a any pharmaceutically acceptable protecting group selected from among the group consisting of C(O)-alkyl, C(O)Ph, C(O)aryl, CH<sub>3</sub>, CH<sub>2</sub>-alkyl, CH<sub>2</sub>-alkenyl, CH<sub>2</sub>Ph, CH<sub>2</sub>-aryl, CH<sub>2</sub>O-alkyl, CH<sub>2</sub>O-aryl, SO<sub>2</sub>-alkyl, SO<sub>2</sub>-aryl, *tert*-butyldimethylsilyl, *tert*-butyldiphenylsilyl, or both Pg's may come together to form for a 1,3-(1,1,3,3-tetraisopropylsilyl)disiloxanylidene).

Claims 128-129 (Cancelled).

Claim 130 (New): A (2'R)-2'-deoxy-2'-fluoro-2'-C-methyl nucleoside ( $\beta$ -D) or its pharmaceutically acceptable salt thereof of the formula:



Claim 131 (New): A pharmaceutical composition comprising the nucleoside of claim 130 or its pharmaceutically acceptable salt and optionally a pharmaceutically acceptable carrier.

Claim 132 (New; Withdrawn): A method for the treatment of a Flaviviridae infection or prophylaxis of hepatitis C infection

comprising administering to a mammal in need thereof host an antivirally effective amount of the nucleoside of claim 130 or its pharmaceutically acceptable salt optionally in a pharmaceutically acceptable carrier;

wherein a viral agent of the Flaviviridae infection is selected from among a flavivirus and a pestivirus.

Claim 133 (New; Withdrawn): The method of claim 132, wherein the antivirally effective amount of the nucleoside is administered in combination or alternation with at least one treatment selected from among an antiviral treatment, an antibacterial treatment, an anticancer treatment, and interferon.

Claim 134 (New): A liposomal composition comprising liposomes comprising the compound of claim 6 and optionally a pharmaceutically acceptable carrier.

Claim 135 (New): A liposomal composition comprising liposomes comprising the compounds of claim 11 and optionally a pharmaceutically acceptable carrier.

Claim 136 (New): A liposomal composition comprising liposomes comprising the compounds of claim 130 and optionally a pharmaceutically acceptable carrier.